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The Commonwealth of Massachusetts

Executive Office of Environmental Affairs

Department of Environmental Quality Engineering

One Winter Street, Boston 02108

THOMAS F. McLOUGHLIN
Acting Commissioner

November 15, 1984

Merrill S. Hohman, Director
Waste Management Division
US Environmental Protection Agency
JFK Federal Building
Boston, MA 02203

Dear Mr. Hohman:

The Department is providing comments on the August 1984 draft Feasibility Study of Remedial Action Alternatives, Acushnet River Estuary Above the Coggeshall Street Bridge, New Bedford, Mass. site and the September 1984 Addendum. The six (6) remedial action alternatives proposed to address the "hot spot" contamination area are reasonably representative of the spectrum of known technologies.

After a detailed and thorough review and evaluation of the proposed alternatives, the Department has determined that all six alternatives, as presented in the above document, have major deficiencies that would impede their effectiveness as remedial alternatives. With the incorporation of the technical modifications that are described later, we believe that three of these remedial alternatives can be rendered more effective and acceptable.

The Department cannot support the following three alternatives for the remediation of the contamination at this New Bedford site for the major reasons briefly cited below.

A. No Action

This alternative will not alleviate the present health risks and environmental impacts associated with the "hot spot" contamination. The long time required for the natural degradation of the contaminants is unacceptable for the protection of the public health, welfare, and the environment.

B. Sediment Dredging with Disposal in an Upland Containment Site:

As stated in an earlier letter, the Department anticipates substantial difficulty in the implementation of this alternative in communities not directly or presently affected by the contaminants. In addition, no technically suitable and acceptable upland site has been identified in your companion study.

C. Hydraulic Control with Sediment Capping:

The effectiveness of this alternative, especially relative to long-term integrity of the sediment cap, is highly questionable. This alternative, as presented in the above document, would require substantial technical modification before it can be rendered acceptable as an effective long-term remedial solution.

The Department can support the following three remedial alternatives, but only after modifications, described below, in their design.

A. Sediment Dredging with Disposal in In-Harbor Subsurface Cells;

B. Sediment Dredging with Disposal in a Partially Lined, In-Harbor Containment Site; and

C. Sediment Dredging with Disposal in a Lined, In-Harbor Containment Site.

Technical Modifications:

A. For each of the above three acceptable alternatives, the Department is requesting that the contaminated dredge material be chemically fixed to reduce the potential for groundwater contamination. A possible method of chemically-fixing the PCBs and heavy metal laden dredge sediments would be to inject into the dredge slurry pipeline a commercially available mixture, generally of portland cement and silica,which would chemically react with the dredged sediment. Once the chemical reaction has taken place during slurry transport, the potential for contaminants to be released from the sediment matrix during subsequent disposal is greatly reduced.

B. Each of the above three alternatives must include controls for fugitive emissions of the chemical contaminants and for dust, especially those resulting from the handling, temporary storage, and dewatering of the dredge sediments. Also, ambient air monitoring must be included throughout the implementation of the remedial action.

C. Each of the above three alternatives must provide for the monitoring of groundwater quality. A leachate collection and removal system may be an appropriate supplement.

D. For the two above alternatives #B and C, other in-harbor disposal areas should be identified, as previously requested in the Department's letter of August 1984, that would minimize destruction of vegetated wetlands (map attached for initial identification). Also, a thorough sampling and analysis of the salt marshes, identified in the two alternatives as disposal areas, for chemical contamination should be performed as a priority in the selection of these alternatives.

E. The time frame estimated for completion of any of the above three alternatives, in particular, for alternatives #A and C, is much too long. EPA should examine methods to expedite the process. In the interim, measures should be taken to address and minimize the direct contact hazards and exposures in the "hot spot" contaminated area.

F. None of the alternatives proposed involves the destruction of the PCB contaminants. The EPA should aggressively initiate efforts to identify methods for the safe and permanent degradation

(e.g., by chemical or biological agents) of the contaminants. As stated in the Department's letter of August 1984, a properly designed pilot test run of promising, but yet untested remedial action alternatives, may offer valuable information towards devising a permanent solution for this site.

The Department looks forward to the continued coordination of the remedial alternatives on this complex site and the discussion of the above comments in greater detail. If you have any questions, please contact Ms. Yee Cho of the Division of Hazardous Waste at 292-5591.

Very truly yours,

Thomas F. McLoughlin
Acting Commissioner

TFM/YC/dh

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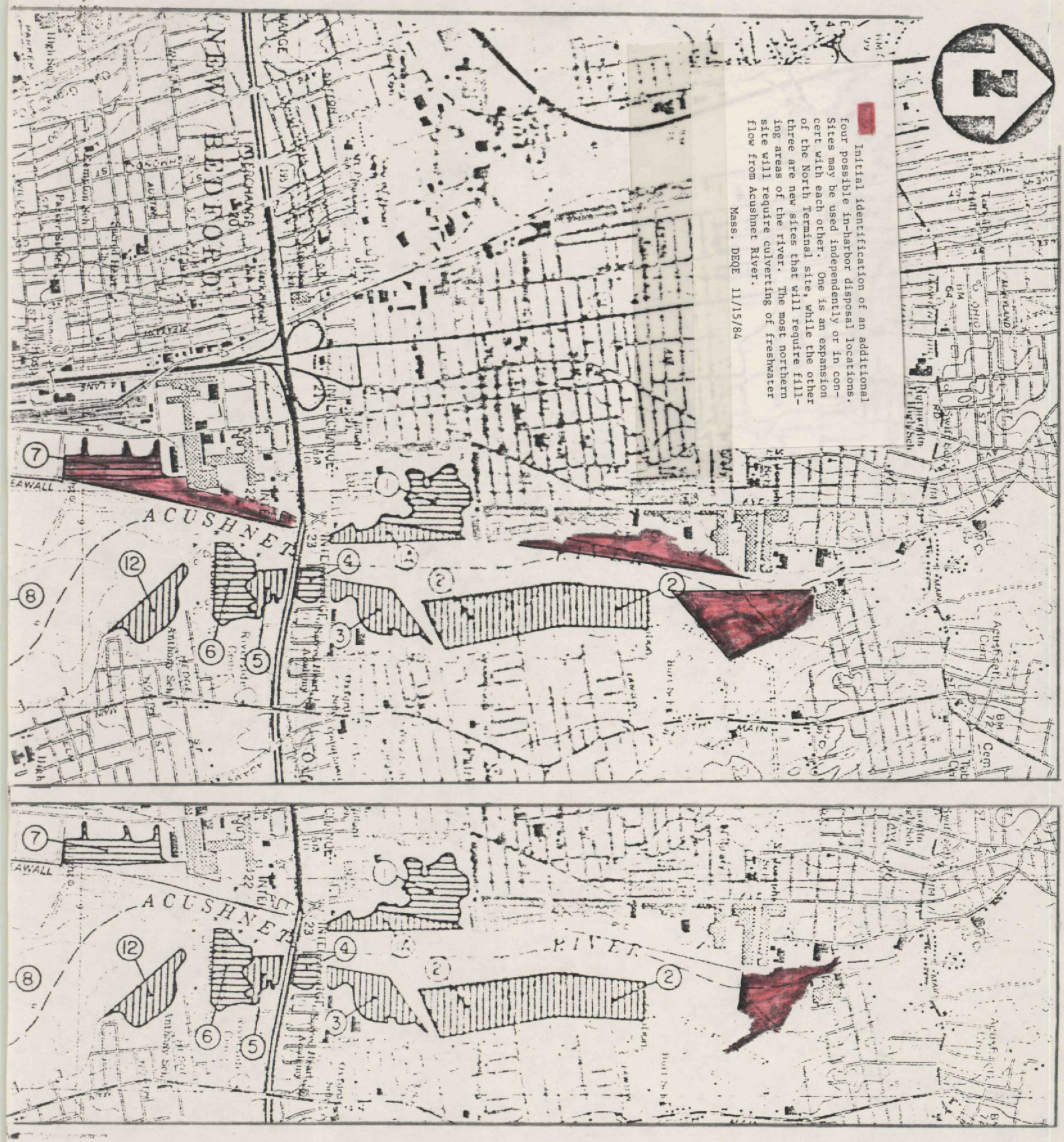

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RHAVEN HARBOR

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FIGURE 3-1

NUS CORPORATION

A Halliburton Company